

In the Claims

No amendments to the claims are proposed; thus, it is not necessary to file a Listing of the Claims.

Analysis of Claim Rejections.

The USPTO rejected Claims 1, 2, 6 and 8 under 35 USC §103(a) as being unpatentable over Cullen, et. al., U.S. Patent No. 4,957,521 or Davy, U.S. Patent No. 3,199,756 in view of Applicant's Admitted Prior Art at page 4, lines 8 - 14 and page 5, lines 14 - 16 of the application and Fukumoto, et. al., U.S. Patent No. 5,961,025. In addition, the USPTO rejected Claims 1, 3, 4, 7 and 9 under 35 USC § 103 as being unpatentable over Cullen, et. al. or Davy in view of Applicant's Admitted Prior Art and Ward, U.S. Patent No. 6,342,118. Finally, the USPTO rejected Claims 1 and 5, under 35 USC § 103 as being unpatentable over either Cullen, et. al. or Davy in view of Applicant's Admitted Prior Art and Klingebliel, U.S. Patent No. 5,385,622. The applicants respectfully traverse each rejection of the claims.

The applicants have discovered a spliced continuous strip of packets used to hold bulk materials, which is prepared by a number of different processes. The processes for the preparation of these spliced continuous strip of packets require several steps including: a) forming a continuous strip of packets from packaging material and filling those packets with bulk material, wherein adjacent packets share a common sealed area of packaging material, b) forming openings in the common sealed areas between adjacent packets, c) cutting the

continuous strip entirely across the common sealed area of the packets at two separate locations on the continuous strip to forms cut ends, wherein each of the cut ends of the continuous strip contains one of the openings in the common sealed area, and d) without using splicing tape, splicing together the two cut ends of the continuous strip with openings, such that the openings overlap.

The claims claim at least three separate processes for splicing the two cut ends together including: a) ultra-sonic welding, b) melting or partially melting the cut ends of the continuous strip together, (this process includes the specific process of impulse heating), and c) use of an adhesive material. The applicants respectfully assert that these product by process claims are not disclosed by any of the cited prior art.

To understand and thereby distinguish the prior art, it is necessary to review the combinations of references cited and discuss whether they disclose each process step claimed in the claims, as filed, as well as each product that is produced by those process steps. While the USPTO asserts three separate grounds for the rejection of varying groups of claims, the bases for the rejections generally rely on the same argument. Specifically, the USPTO asserts that the combination of Cullen, et. al. with the "Applicant's Admitted Prior Art" or Davy with

the "Applicant's Admitted Prior Art" disclose the claimed invention, except for the specific splicing process. The USPTO then cites Fukumoto, et. al. as disclosing that ultra-sonic welding is equivalent to the use of an adhesive tape for the binding of a first web to a second web. The USPTO next cites Ward as disclosing that heat sealing is the equivalent to the use of an adhesive tape for the binding of the first web to the second web. Finally, the USPTO cites Klingebiel as disclosing that applying an adhesive is equivalent to the use of adhesive tape for the binding of the first web to the second web. Thus, the USPTO makes three similar arguments asserting that Cullen, et. al. or Ward when combined with the "Applicant's Admitted Prior Art" teaches all steps of the product by process except for the particular splicing process. The USPTO then asserts that the particular splicing processes are taught by the three cited references.

The applicants respectfully assert that at least two specific process steps are not disclosed by Cullen et. al. or Ward when combined with the Applicant's Admitted Prior Art. The applicants also respectfully assert that because those process steps are not taught, the products produced by those processes, as claimed, are different from the products disclosed by the cited prior art alone or in combination.

The applicants acknowledge that Cullen, et. al. and Ward

teach processes for the preparation of a continuous strip of packages filled with bulk material. However, **neither** Cullen, et. al. nor Ward teach the cutting of the ends of the packages in the specific manner claimed or the splicing of the ends of the packages together in the specific manner claimed. (Clearly these processes are also not taught by any of the three splicing process references cited i.e. Fukumoto, et. al., Ward, and Klingebiel.)

1) First process step that is not disclosed by prior art. Claim 1, lines 9-13, requires that the continuous strip be cut "...entirely across the common sealed area of the packets at two separate locations on the continuous strip to form cut ends, wherein each of the cut ends of the continuous strip contains one of the openings in the common sealed area, ...". This is an important process step and produces a product not disclosed by any of the cited prior art. Each of Cullen, et. al., Ward and the Applicant's Admitted Prior Art fails to teach the cutting of the ends of the bags in the manner that is claimed. While an opening 20 exists in the common sealed area 17 of the Cullen, et. al. strip of packets, the only method taught for cutting this continuous strip requires that the sealed section 12 be cut directly through the opening 20. In support of this assertion Col. 2, lines 32 - 38 of Cullen, et. al. states that the cutting process occurs "while strip 10 is

passing through a machine so that a shear mechanism can cut through section 12, preferably along line 5-5 (FIG.1)...". Reviewing FIG. 1, line 5-5 passes directly through opening 20. Accordingly, the combination of Cullen, et. al. with any of the other references, including the Applicant's Admitted Prior Art, teaches a person skilled in the art to cut the sealed section 12 of the continuous strip of the material through opening 20. Thus, a product produced by the Cullen, et. al. process, which does not contain a cut end with an undisturbed opening, is different from the product produced by the process of the invention, which does contain an undisturbed opening in its cut end.

A similar method to that of Cullen, et. al. is employed in Davy to form the connecting web 10--10. This connecting web 10--10 is "...punctured to produce the sprocket receiving aperture 9 therein and form the connecting web 10--10." (Column 4, lines 44-46.) Presumably, the connecting web is then cut along line 10--10 when the individual packets need to be separated from the continuous package chain. In this process it is clear that the cutting of the connecting web may only occur through the area designated by 10--10, as shown in Figure 1. Thus, as with the product of Cullen, et. al. the end of the product of Davy does not contain an undisturbed opening as is produced by the applicants' process.

The Applicant's Admitted Prior Art fails even to mention a continuous strip of material containing an opening, much less the concept of cutting the common sealed area of the continuous strip leaving an opening undisturbed in that area.

In contrast, Claim 1 of the invention requires that the continuous strip be cut in such a manner "wherein each of the cut ends of the continuous strip contains one of the openings in the common sealed area...". Thus, in the product of the application, when a cut is made to the continuous strip of packets of the invention, the cut must not be made through the opening, but rather on one side of the opening yet still within the sealed area, thus leaving the opening available for use in the splicing process.

Thus, this specifically claimed step in the process of the invention produces a product that is not disclosed by the combination of Cullen, et. al. with the Applicant's Admitted Prior Art or Ward with the Applicant's Admitted Prior Art or either of the two with any of the three cited splicing process patents.

In fact, the specific disclosures of Cullen, et. al. and Davy teach away from products produced by this important process step of the invention.

2) Second process step that is not disclosed by the Prior Art. A second process step of Claim 1 which is not taught by

the prior art is the last claimed process step, which requires that "...without using splicing tape, splicing together the two cut ends of the continuous strip with openings such that the openings overlap." (Claim 1, lines 14 - 16).

While the sealed portion of each product strip of Cullen, et. al. and Davy contains openings, Cullen, et. al. and Davy teach that when these sealed portions are cut, they must be cut through these openings (Cullen, et. al., Col. 2, lines 35 - 38, Davy, Col. 4, lines 40 - 51). Thus, the products of Cullen, et. al. and Davy also fail to contain cut ends, each containing an opening, which are spliced together by placing the two cut ends together "such that the openings overlap", because there are no openings to overlap in the products of Cullen, et. al. or Davy! Obviously, the Applicant's Admitted Prior Art fails to disclose this process step as the cited sections of the application fail to disclose a strip of material containing an opening. Thus, the product produced by this process step is also not taught by the cited prior art.

In rejecting each claim of the invention at issue based on 35 USC 103, the USPTO must prove that the combination of references teach each and every component of the invention, as claimed. The standard to be used in making this determination also requires that

There must be some motivation, suggestion or teaching of

the desirability in making this specific combination that was made by the applicant... In re Ketzab, 55 USPQ 1313 (Fed. Cir. 2000)

While there may be a motivation, suggestion or teaching for one to splice the ends of a continuous strip using the processes disclosed in the three splicing process patents, there is no suggestion, motivation or teaching of the specific process of splicing the specific components of the continuous strip to produce the specific product that is claimed in Claim 1 of the invention. In addition, none of Cullen, et. al., Davy, the Applicant's Admitted Prior Art, or any of the other three cited patents disclose individually or in combination the claimed method for splicing or any teaching or motivation to cut the continuous strip of Cullen, et. al. or Davy at any location other than through the openings in the continuous strip. Further, there is no suggestion, teaching or motivation to splice the cut ends of the products of any of the references in such a way "that the openings overlap", as is also required by Claim 1.

Failure of the cited Prior Art to teach the products, as claimed. One cannot assert that the products, which are produced by the processes of Cullen, et. al., Davy and/or the Applicant's Admitted Prior Art are the same as the products produced by the process, as claimed, regardless of the splicing process that is used. It is unclear whether the packages

produced by Cullen, et. al., Davy or the Applicant's Admitted Prior Art could even be spliced together using any splicing process. Certainly there is no suggestion or motivation in Cullen, et. al., Davy or Applicant's Admitted Prior Art for such splicing. Notwithstanding, it is clear that any products produced by these processes could not have been spliced together in such a manner that each cut end of each package which is spliced contains an undisturbed opening "such that the openings overlap", as required by the claims of the application. Further, each of the ends of the continuous strip of packages of the prior art, if spliced, could not have been cut in such a manner as to contain "one of the openings in the common sealed area", as is also required by the claims of the application. Thus, it cannot be argued that the products produced by the processes of the claims of the application are the same as the product(s) that would have been produced based on the processes disclosed in the cited prior art, used alone or in combination. (MPEP 2113). As such, the combination of these references fails to teach or suggest the invention, as claimed.